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REF

McGLADREY & PULLEN

Certified Public Accountants and Consultants

Santa Clara Valley Water District
FC 223 (08-29-88)

Procedure 0-701
Page 1 of 2
Date September 28, 1989

SUBJECT: MANAGEMENT OF THE DISTRICT'S VEHICLE FLEET

I. Purpose

To establish fleet operation and maintenance responsibilities and policies necessary to manage the vehicle fleet to effectively meet the transportation and equipment needs of the District.

II. Definition

The term "Vehicle Fleet" used in this procedure refers to all classes of vehicles and equipment within the Equipment Working Capital Fund (EWCF).

III. Assignment of Responsibility

The Maintenance Department Manager is responsible for the overall administration and management of the EWCF and shall establish fleet operations and maintenance policies and guidelines necessary for the efficient and effective management of the fleet, except as specifically assigned to other Department Managers.

IV. Policies and Procedures

A. Operation and Maintenance Policies

Detailed operation and maintenance policies established to manage the fleet and the fund are contained in the "Fleet Operation and Maintenance Policy Manual".

The Maintenance Services Division Head is responsible for maintenance of the operations and maintenance policy manual.

B. Addition of Vehicles to the Fleet

Vehicles may be approved for addition to the fleet through the budget process, by special Board action, or under the General Manager's authority.

The justification for adding a vehicle to the fleet is the responsibility of the Department Manager of the Department requesting an additional vehicle.

C. Purchasing Fleet Vehicles and Equipment

The Maintenance Services Division Head is responsible for preparing specifications and purchasing documents necessary to purchase fleet vehicles in conformance with District purchasing policies and procedures. All vehicles become part of the fixed asset inventory of the EWCF.

EQUIPMENT WORKING CAPITAL FUND KICK-OFF MEETING

Wednesday, August 11, 1993
3 p.m.
Downstairs Conference Room

AGENDA

AGENDA ITEM	**TIME LIMIT**
1. Review the consultant's recommendations.	15 Minutes
2. Explanation of implementation process.	10 Minutes
3. Identify members of the Inter-departmental Implementation Team.	15 Minutes
4. Identify Project Coordinators for the following task sub-committees: A. Organizational Considerations B. Rate Structure Analysis C. Fund Administration D. Information Systems E. Other	20 Minutes

EQUIPMENT WORKING CAPITAL FUND
MCGLADREY & PULLEN RECOMMENDATIONS

#	RECOMMENDATION DESCRIPTION	PAGE #	PERSON RESPONSIBLE	COMPLETION DATE	COMMENTS
	ORGANIZATIONAL CONSIDERATONS MAINT				
1	Form joint committee with Accounting, ISD and Maintenance for review of Fund's operations and finances.	5	Maintenance Mgr		
2	Develop a procedure to routinely review the fund's financial performance to identify rate structure problems.	6	Financial Mgr		
3	Develop a procedure to routinely identify necessary improvements to fund operations and to coordinate tasks, timing, and resources.	6	Maint. Mgr		
4	Develop a procedure to advise the Maintenance Services Superintendent and the Maintenance Manager of concerns and problems regarding the fund's financial strength and operations.	6	Finance Magr		
5	Update and implement the EWCF Manual.	6	Mant Mgr		
6	Develop key parameters with the Investment and Risk Management Officers each year to calculate rate structure.	7	Maint Mgr		
	RATE STRUCTURE ANALYSIS FIN				
7	Create a method and procedures to alert management that O&M revenues and expenses are in a deficit position.	8	Fin		
8	Revise & reinstate the cash flow statement to ensure the replacement reserves are considered when comparing O&M revenues and expenses.	8	Fin		
9	Revise the procedures to require written approval from Management to fund O&M from the Replacement Reserve.	8	Fin		

EQUIPMENT WORKING CAPITAL FUND

MCGLADREY & PULLEN RECOMMENDATIONS

#	RECOMMENDATION DESCRIPTION	PAGE #	PERSON RESPONSIBLE	COMPLETION DATE	COMMENTS
10	Recalculate O&M component of the Fund's rate structure to include all components of the Maintenance Services Division's operating and maintenance expenses.	8			
11	Revise all Replacement Reserve rates using current financial information.	9			
12	Adjust the Self-Insurance Rate to compensate for current and forecasted losses.	10			
13	Replace mileage calculation for Class I vehicles with "charge out" system based on hours or days.	11			
14	Develop a component for excess mileage in the calculation of Class I vehicle charges.	11			
15	Establish a "low utilization" surcharge for non-pool vehicles to recoup depreciation and inflation.	11			
	FUND ADMINISTRATION AND MANAGEMENT	MAINT			
16	Initiate a procedure to establish the timing to review O&M and Self-Insurance rates annually.	11			
17	Initiate a procedure to establish the timing to conduct periodic financial reviews by class.	11			
18	Review the longevity of vehicles and increase the length of time that vehicles will be held in the fleet.	12			
19	Establish a firm policy regarding the timing of vehicle replacement.	12			
20	Maintain strict interpretation where the IRS states the "employer requires the employee" to use a Fund vehicle for commuting.	14			

EQUIPMENT WORKING CAPITAL FUND

MCGLADREY & PULLEN RECOMMENDATIONS

#	RECOMMENDATION DESCRIPTION	PAGE #	PERSON RESPONSIBLE	COMPLETION DATE	COMMENTS
21	Review the vehicle use impact of implementing the new procedure #0-704.	14			
22	Adjust rate structure to ensure adequate amounts are generated to fund the O&M, Replacement Reserve, and Self-Insurance Reserves.	14			
23	Reduce costs by converting Class I vehicles to cash where appropriate or transferring vehicles to other activities.	15			
24	Review the decreased demand for maintenance services.	15			
25	Designate position in Maintenance Services to be responsible for the day-to-day operation of Fund activities.	15			
26	Appoint chairman to the joint committee.	15			
27	Establish a minimum of one individual within the Accounting Division that fully understands the Fund.	16			
	INFORMATION SYSTEMS ASD Cesar				
28	Redevelop EWCF system on HP 3000 using modern programming.	17			
29	Prepare a conceptual system design document.	17			
30	ISD to produce report that shows Vehicle Cost Report with sufficient detail for analysis.	17			
31	ISD & Accounting to develop interface to ensure individualized data is transferred into the General Ledger.	18			

EQUIPMENT WORKING CAPITAL FUND

MCGLADREY & PULLEN RECOMMENDATIONS

#	RECOMMENDATION DESCRIPTION	PAGE #	PERSON RESPONSIBLE	COMPLETION DATE	COMMENTS
32	Accounting to revise methodology for Class IV Replacement Reserve Rates.	19			
33	Prepare more detailed specifications for the Fleet Maintenance System.	20			
34	Obtain competitive proposals from qualified vendors for a comprehensive Fleet Maintenance System.	20			
35	Consider specialized vendor recommendations for the new Fleet Maintenance System.	20			
36	Select and implement the most appropriate Fleet Maintenance System.	20			
37	Develop interface to automate data from Fuel Trak system to main Fund information system.	21			
38	Develop and implement an editing routine to prevent incorrect mileage entries at fuel pumps.	21			
	OTHER MAINT Hutchen				
39	Review sign-out system and increase security to Fund vehicles.	22			
40	Initiate project to review cost savings from renting/leasing vehicles and equipment.	22			
41	Institute a procedure that requires competitive bids for leasing Class II & III equipment to compare to the proposed fund rate structure.	22			

HD 1695 [illegible]

Santa Clara Valley Water District

Rate Structure Analysis and Operational Study
of
The Equipment Working Capital Fund

June, 1993

McGLADREY & PULLEN

Certified Public Accountants and Consultants

McGLADREY & PULLEN
Certified Public Accountants and Consultants

July 12, 1993

Mr. Charles G. Wilson, Finance Manager
Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118-3686

Dear Mr. Wilson:

We have completed the Rate Structure Analysis and Operational Study of the Equipment Working Capital Fund (EWCF) for the **Santa Clara Valley Water District (SCVWD)**. This review was conducted in accordance with the arrangements set forth in your request for proposal dated December 9, 1992. This report presents the findings and recommendations resulting from our analysis and review.

We value this opportunity to serve the **Santa Clara Valley Water District** and express our sincere appreciation for the courtesies and cooperation extended to us throughout this project. The successful implementation of our recommendations will require significant commitment and careful follow-through by all parties involved. We are available for implementation assistance as deemed appropriate and beneficial by the **Santa Clara Valley Water District.**

Sincerely,

McGLADREY & PULLEN

Geoffrey H. Wold

Geoffrey H. Wold, Partner
National Director of Information
Technology Consulting Services

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I. EXECUTIVE SUMMARY

The purpose of the Equipment Working Capital Fund, as stated in the notes issued with the **Santa Clara Valley Water District's** General Purpose Financial Statements, is as follows:

> "The Equipment Working Capital Fund is an internal service fund established to finance and account for equipment services furnished to other funds within the District. The purpose of the fund is to generate operating earnings sufficient to keep the original fund intact and to replace vehicles and equipment as required."

Our findings as provided in this report indicate that:

- The Fund's operations, although not administered or managed as efficiently as is necessary, are collecting sufficient revenue for all Fund reserves.

- There are significant areas of improvement necessary to ensure that the Fund's finances are adequate for future operations and replacement of fleet vehicles. These should be addressed as rapidly as possible to ensure adequate collection of O&M and Self-Insurance revenues.

There are three areas of concern that affect the administration and management of the Equipment Working Capital Fund:

1. **Rate Structure:**

    - Operating & Maintenance Revenues appear to have been insufficient to fund the continuing maintenance and supply operations of the Fund.

    - Self-Insurance Revenues appear to have been insufficient to fund the loss exposure experienced, particularly for Class II and III vehicles/ equipment.

    - Replacement Reserve appears to have been more than adequate to cover depreciation expenses and inflation, plus cover the shortages incurred in the Operating & Maintenance Revenues.

2. **Administration and Management:**

- There has been insufficient reviews of the various rates involved with the Fund, allowing the situation to occur as described above.

- There is insufficient coordination and communication between the various divisions responsible for Fund operations, creating opportunities for misunderstandings. The most crucial of these is where Replacement Reserve dollars as reported by Fund information system reports does not agree with the actual dollars reported by the Accounting Division.

3. **Information Systems:**

- The continued use of the Unisys (i.e., Burroughs) computer system for Fund information systems operations is a major concern due to the outdated nature of the hardware, software, documentation, and processing mode. Additionally, there are several critical system interfaces that are needed for efficient operations. Therefore, the system should be completely redeveloped on the Hewlett-Packard computer.

This report contains findings and recommendations relating to the Fund's rate structure, administration and management, and the information systems being used and proposed. In this regard, we have conducted the review from both an organization-wide and system perspective, determining specific strengths and shortcomings within departments as they work with the fund, as well as their integration, communication, and coordination among the other departments responsible for working with the Fund. In addition, an Implementation Action Plan is presented in the final section of the report.

We were generally impressed with the quality and dedication of both staffs. With good personnel on your staffs, plus focus on key activities, we believe the opportunities for improvement are significant and achievable.

II. PROJECT BACKGROUND

A. Purpose

The purpose of this review was to analyze the existing rate structure being used by the of the Equipment Working Capital Fund (EWCF), and conduct an operational study of the administration, systems, and management of the Fund.

B. Scope

The scope of this review was limited to the organization, duties, and responsibilities of various SCVWD departments as they relate to the administration, systems, and management of the EWCF. Our review encompassed the present policies, procedures, and systems related to the administration and management of the Fund's rate structure, plus the various departmental operations and reports related to the operations of the Fund. Finally, we examined the existing data processing system from the standpoint of reviewing the existing EWCF software programs and proposed interfaces and preventative maintenance systems.

C. Approach

In connection with conducting this Rate Analysis and Operational Study, we performed the following activities:

1. Reviewed Fund documentation provided prior to the opening meeting and coordinated consultants' activities.

2. Conducted an opening meeting with key Fund management and personnel.

3. Interviewed Maintenance, Finance, and Information System personnel related to Fund administration and management, including:

    - Ken Alameida
    - Jeff Blank
    - David Born
    - Jim Cooper
    - Jim Ferguson
    - Mike Finn
    - Charlene Forstner
    - Carleen Foster
    - Steve Fujii
    - Roy Francis
    - Lynda Gorth
    - Angela Newman
    - Ed Parfet
    - Steve Pietrobono
    - Lora Williams
    - George Wilson

    Additionally, there were many other staff members that were introduced into interviews to answer specific questions that are not listed above.

4. Reviewed the existing rate structure being used by the Fund, and the adequacy of the rate structure to meet the needs of the Fund.

5. Analyzed existing procedures related to Fund operations.

6. Evaluated existing information system programs, plus current and proposed interfaces, related to the Fund.

7. Analyzed the existing and proposed Fleet Preventative Maintenance System for potential interfaces and general adequacy for Fund operations.

8. Determined the interfaces between the Fund and Accounting, plus the adequacy and use of management and control reports issued by the Fund.

9. Reviewed the criteria and procedures developed by the District's Vehicle Review Committee for the use of Fund vehicles.

10. Developed specific findings and recommendations for improving the administration and management of the Fund that will, once fully implemented, result in increased savings, economies, service levels, and efficiencies.

III. FINDINGS AND RECOMMENDATIONS

A. Organizational Considerations

1. Organization Structure

Findings:

- The skill levels and capabilities of the key managers and operators of the EWCF that were interviewed during this review appeared to be more than sufficient to manage and administer the Fund's operations. We did not observe a situation where the personnel involved were not considered adequate to perform the task.

- The organizational structure used to accomplish the management and administration of the Fund appears to provide several opportunities for poor coordination and communication. The lack of an EWCF Manual in the Maintenance Services Division, while one existed in the Accounting Division, is an example of poor coordination and communication.

- The management and administration of the EWCF is decentralized, with no one individual fully understanding the systems and integration requirements of the Fund. Operations regarding the Fund are performed by the Maintenance Services, Information Systems, and Accounting Divisions, with each not fully understanding the role of other departments.

Recommendations:

① A joint committee, with representative staff members from the Maintenance Services and Accounting Divisions, should be formed to meet and review the Fund's operations and finances. As necessary, this committee should include the representatives from the Information Services Division. The purpose of this committee is to:

- Improve the coordination and communications between these two key groups responsible for the Fund's administration and management.

- Review the Fund's financial performance to identify rate structure problems expeditiously and routinely.

- Identify necessary improvements to Fund operations and provide a forum to coordinate tasks, timing, and resources.

- Advise the Maintenance Services Division Superintendent and the Maintenance Manager on concerns and problems regarding the Fund's financial strength and operations.

2. EWCF Operating Manual

Findings:

Key managers and operators from the Maintenance Services Division, particularly those responsible for the administration and management of the various supporting systems related to the Equipment Working Capital Fund's operations, where not aware of the existence of an EWCF Manual outlining the operations of the fund and the calculation of the rate structures. Upon investigation, we found that although there was at one time an EWCF Manual in the Maintenance Services division, there has been sufficient turnover to result in the manual being misplaced. The Manual, although outdated, is a valuable tool to understand the workings of the Fund's systems. The lack of this manual in the hands of several key persons in the Fund appears to have seriously degraded their understanding of their responsibilities and the procedures regarding the administration and management of the Fund, and ultimately the operation of the Fund overall.

Recommendations:

- Due to its outdated nature, the EWCF Manual should be reviewed and updated where necessary to bring it into line with Fund developments since its last update on September 19, 1979. We recommend that the update be structured using exhibit sections listing rates structures and other matters that change frequently. Exhibit sections should be inserted and changed as needed to keep the Manual updated. ②

- The updated EWCF Manual should be re-distributed, reviewed, and re-implemented where necessary to standardize and improve the administration and management of the Fund's operations. ③

3. Specialized Staff

Findings:

Key parameters necessary to administer and manage the Fund's operations should be developed with the assistance of specialized staff at the SCVWD that may not necessarily be assigned to the Fund. The Self-Insurance and Inflation Rates are not calculated using the subject-matter specialists that are already available on staff.

Recommendations:

Routinely, when developing the key parameters to be used each year to calculate the EWCF rate structure, the following staffs should be consulted for assistance: ④

- Investment Officer should be consulted to provide the Inflation Rate factor to be used in the rate structure calculations, and;
- Risk Management Officer should be consulted to provide the Self-Insurance Rate based on past experience and future projections.

B. Rate Structure Analysis

1. Financial Reporting and Controls

Findings:

There is no mechanism in place that prevents or easily alerts management, to stop the cross-leveling of monies from the Replacement Reserve to fund shortages in the O&M funds. Annual budgets are developed using dollars in total for O&M and revenue, without providing the visibility that the O&M portion of revenue is insufficient to cover expenses.

Recommendations:

The financial reporting method should be reviewed and modified to create a method and procedures that will easily alert management 5 that O&M revenues and expenses are in a deficit position. The Cashflow Statement required by the EWCF Manual should be modified and reinstated to accomplish this. Currently the cashflow statement contained in the Manual will not ensure that the Replacement Reserves are considered when comparing O&M revenues and expenses. Written approval should be required from 6 Management to fund O&M from the Replacement Reserve.

2. O&M Rate

Findings:

The current procedures used to review and update the rate structure is insufficient to ensure the adequate collection of revenue to meet the EWCF's requirements for both Operating and Maintenance (O&M) funds and fleet Replacement Reserve funds. As shown in our analysis contained in Exhibit B, the amount collected to fund Operating and Maintenance (O&M) expenses in FY92 were insufficient by $379,753.89. As shown by Exhibit A and C, the total amount collected was sufficient to cover this shortage, but only by using part of the amount collected by the Replacement Reserves. Consequently, the total dollars shown as having been collected according to various Fund reports (such as FW30R) are not available in the amounts shown.

Recommendations:

7

The O&M component of the Fund's rate structure should be recalculated to include all components of the Maintenance Services Divisions operating and maintenance expenses as shown in Exhibit B. This should be initiated as soon as possible.

3. Replacement Reserve Rates

Findings:

- The amount shown in the FW30R report does not accurately eflect the true dollars available to replace vehicles and equipment in the Fund. Exhibit C shows that although a theoretical excess of $495,756.12 was collected for the Replacement Reserve's needs in FY92, beyond the amount needed to fund depreciation and the inflation factors for that year. However, when considering the O&M shortage of $379,753.89 as listed in Exhibit B, there is only approximately $ 116,002.23 excess collected.

- Based on this analysis, there appears to have been sufficient dollars collected in FY92 for the Replacement Reserve. The key indicators of this is that Exhibit C shows that depreciation, the most solid and understood basis to calculate lost value of the vehicles and equipment, and the allowance for the inflation factor (required to purchase the same type of vehicle later at a future/higher cost) have been collected, with some excess. Analyzing Exhibit A though shows that there may have been a shortage of funds in FY90, and Exhibit E indicates that inflation may also create a shortage to the Fund of $458,558.86.

- The result of this analysis indicates that the **SCVWD**, although not apparently by the Fund plan, has been collecting sufficient monies from the operating divisions to fund O&M plus the Replacement Reserve. However, the tracking of these separate parts of the Fund has been inadequate to ensure proper funding, and as O&M expenses continue to increase there eventually could be a situation where there is not enough Replacement Reserves collected.

Recommendations:

Fund management should revise all Replacement Reserve rates using current financial information. As the analysis has shown in Exhibits B, C, and E, the current rates are significantly less than the actual needs of the Replacement Reserves.

⑧

4. Self-Insurance Rate

Findings:

The Self-Insurance Rate is currently insufficient to provide the funds needed to cover actual losses, based on FY92's experience level. Exhibit D shows that Fund revenue for FY92 was $11,557.17, compared to the losses incurred of $16,402.

Recommendations:

⑨

Fund management should adjust the Self-Insurance Rate to compensate for current and forecasted losses. Based on data shown in Exhibit D, the rate should be increased by approximately:

- 27.5% for Class I vehicles
- 2241.2% for Class II and III vehicles

5. Rate Structure

Findings:

Our review showed that several vehicles have averaged very low annual mileage (ranging from 3,000 to 6,000 miles per year). These vehicles would not capture sufficient Replacement Reserves to fund the vehicles ultimate replacement based on the age of the vehicle. Additionally, vehicles used for short distance trips for local meetings or functions, would incur "city-miles" and place particular strain on the motor-train components, and ultimately require additional maintenance for which the vehicle has not collected sufficient O&M funds.

Recommendations:

- The use of mileage to calculate Class I vehicle charges should be replaced by using a "charge out" system based on hours or days. This method is easy to use and more accurate for vehicles being used infrequently. The Fund has shown that this methodology has worked sufficiently with the Class II and III vehicles. 10
- For vehicles with significant mileage, a component for excess mileage should be considered if in excess of a specific amount planned per day (such as an average use of 50 miles per day would equal 12,000 miles per year). 11
- For non-pool vehicles, a "low utilization" surcharge should be established at end-of-year to recoup depreciation and inflation. 12

C. Fund Administration and Management

1. Rate Reviews

Findings:

- There is no routine review of the various Fund rates critical to the collection of monies needed by the EWCF. Our review shows that the last major review of the EWCF Fund rates has not occurred for several years. The only reviews are for new Class II and III vehicles entered into the Fund.
- Changes in maintenance costs and loss exposure, such as is demonstrated in Exhibit B and D, can result in dollars required from the Replacement Reserve or the District that must eventually be replaced.

Recommendations:

The various Fund rates, particularly O&M and Self-Insurance, should be reviewed annually as a minimum. Periodic financial reviews, by Class, should be used to alert management to problems before they develop, or as a minimum while they are small enough to easily fix. Fund management should initiate a procedure establishing the timing of this annual review. 13

2. Vehicle Replacement Criteria

Findings:

There is no firmly established vehicle replacement criteria being used to determine the timing for vehicle replacement. There is currently an unofficial policy for Class I vehicles stating that 5 years or 65,000 miles is the decision point to be used. Our review also found that Fund management has considered increasing this to 85,000 miles, but has not yet instituted the change.

Recommendations:

- Fund management should review the longevity of vehicles, based on current quality standards resulting in a longer lifetime, with the intent to: (14)
  - Establish a firm policy regarding the timing of vehicle replacement.
  - Increase the length of time that vehicles will be held in the fleet, thereby slowing the cashflow required from the Fund for vehicle replacement.
- Fund Management, in conjunction with its search for a new Fleet Maintenance System, should capture actual maintenance labor, parts, and supplies cost to each vehicle. (15) This would allow the determination of the cost to operate each specific vehicle in the fleet. Vehicles that are incurring excessive maintenance and repair costs could be considered for replacement earlier, before their depreciated lifetime. Conversely, vehicles that are performing well, with very low maintenance and repair costs could be held in the fleet beyond their fully depreciated life.

3. Personally Assigned Vehicles

Findings:

There are a significant number of personally assigned Fund vehicles that have been issued to District personnel under the guidance of SCVWD Procedure 0-704, Authorization of Assignment of District Vehicles. In conjunction with the past application of Procedure 0-704 dated January 4, 1990, a significant number of these vehicles have been taken home where the District has not received sufficient benefit as originally intended.

Our analysis indicated that the District has already identified that this Procedure has received insufficient review and is in the process of implementing a new guideline to Procedure 0-704. We understand that the benefit of the new procedure is that the vehicles will accumulate significantly less commuting mileage.

Recommendations:

We concur with the new Procedure 0-704. (16)

4. IRS Requirement

Findings:

- The Fund's current method of charging $3.00 per day for allowing employees to take vehicles home (commuting purposes only) is appropriate and in accordance with IRS requirements. However, the IRS requires that "for bona fide noncompensatory business reasons, the employer (**SCVWD**) requires the employee to commute to or from work in the vehicle." The definition of **required** appears to have been liberally interpreted previously, resulting in many vehicles used largely for commuting and use during business hours.

- The current charge (for tax purposes) to the individual in these cases, to meet IRS requirements, has been only $3 per day. This rate is well below the costs of using and maintaining these vehicles, and in many cases less than the depreciation costs associated with the vehicle.

Recommendation:

We understand that the implementation of the new Procedure 0-704 will significantly improve this concern. However, the Fund should maintain a strict interpretation where the IRS states the "employer requires the employee" to use a Fund vehicle for commuting. (17)

5. Impact of Procedure 0-704.

Findings:

Fund management has reviewed the cost savings impact of the new Procedure 0-704, but also needs to review the vehicle-use impact of implementing the new Procedure. Understanding that Procedure 0-704 will restrict the taking home of Fund vehicles, our review indicates that the following may occur relatively quickly:

- There will be a significant decrease in the number of miles being accumulated by these vehicles that will decrease the charges to the operating divisions to fund O&M, Replacement Reserve, and Self-Insurance.
- Decreased mileage, as anticipated above, will result in decreased demands on the Maintenance shop for routine maintenance and repair. This may result in the creation of excess maintenance capacity.
- There will be several vehicles that can be pooled, if no longer personally assigned, resulting in a significant number of vehicles that can be sold or transferred to other activities.
- Decreased demand for vehicles could result in decreased need for EWCF vehicle parking, maintenance space, and inventory storage. However, privately-owned vehicles may require significantly more additional space for parking.

Recommendations:

- Fund management should review the potential impact involved with decreasing the mileage used for this class of vehicles. The rate structure should be adjusted as necessary to ensure that adequate amounts are generated to fund the O&M, Replacement Reserve, and Self-Insurance Reserves. (18)

- Fund management should review the potential impact of this new procedure. Costs can be reduced by converting vehicles to cash where appropriate, or transferring the vehicles to other activities. (19)

- Fund management should review the decreased demand for maintenance services to improve service with currently available resources and reduce costs as necessary. Factors to consider are: (20)

  - Space allocation
  - Inventory stock levels
  - Inventory storage requirements

6. Routine Duties and Responsibilities

Findings:

There is no single individual in the Maintenance Services Division principally responsible for the routine operations of the EWCF. For this reason, several key aspects of Fund administration and management have not been accomplished in a routine fashion. Although there appears to be capacity available in the Maintenance Services Division, there has been no such direct assignment of this staff responsibility.

Recommendations:

- The Maintenance Manager should designate a position in the Maintenance Services Division that will be principally responsible for the day-to-day operation of Fund activities (21) such as rate calculation, review of Fund cashflows, and other similar business activities.

- The joint committee discussed in previous recommendations should be chaired by the Maintenance Manager or a designated representative. Ideally, the designated representative would be the person assigned the responsibility for day-to-day administration of the fund. (22)

7. EWCF Accountant

Findings:

Although there are several individuals in the Accounting Division that are knowledgeable regarding some part of the EWCF operations, there is no single individual that fully understands the calculations and transactions involved. Consequently, although the accounting operations appears to meet appropriate standards, there is a great amount of financial data created, but relatively little financial and management information generated that can accurately portray the Fund's status.

Our review showed that in prior years, the Accounting Division did have an EWCF Accountant on staff to perform this role. However this position was eliminated in recent years.

Recommendations:

There should be a minimum of one individual within the Accounting Division that fully understands the accounting and finances of the Fund, and can assist the Maintenance Manager regarding all financial matters for the Fund.

23

D. Fund Information Systems

1. EWCF System

Findings:

The existing system used for processing the Fund has several weaknesses including:

- Obsolete hardware platform (i.e., Burroughs)
- Limited documentation
- Outdated documentation
- Batch processing mode
- Outdated software architecture
- Limited integration
- Inefficient processing techniques
- Redundant data

Recommendations:

The EWCF System should be completely redeveloped on the Hewlett-Packard computer system using modern programming techniques such as on-line processing and database management systems. The system should interface with the following programs: 24

- Fixed asset module of the Mitchell Humphrey System
- General ledger module of the Mitchell Humphrey System
- Warehouse Inventory Tracking System
- Fleet Preventive Maintenance System
- Fuel Trak System

During the first phase of the redevelopment of the EWCF System, the District should prepare a conceptual system design document that includes:

- System flowcharts
- System interfaces
- Report layouts
- Screen definitions
- Record layouts
- Other necessary design documents

Initially, it appears that the best approach is to develop the EWCF System as an extension of the Fixed Asset Module in the Mitchell Humphrey System. However, the District should reevaluate this approach after the conceptual system design is completed.

2. Detailed Reporting

Findings:

The FW30R, EWCF Vehicle Cost Report, provides a column listing Replacement Accumulation. However, there is no prior report showing prior accumulation, current calculations, and new accumulation. Consequently, there is no method available to examine this report for validity and accuracy.

Recommendations: 25

The Information Systems Division should produce a report that shows the above data with sufficient detail for analysis.

3. System Interface

Findings:

There is no direct interface between the Fund's calculation of the Replacement Reserve and the O&M Reserve, and the financial system. Consequently, the revenues of these two reserves are combined, losing crucial individualized data for each vehicle/equipment class.

Recommendations:

26

The Information Systems Division, with the Accounting Division, should develop an interface that will ensure individualized data is transferred into the general ledger system for use in creating the Fund's financial reports.

4. Replacement Reserve Calculation Methodology

Findings:

- Class IV rate data is directly input to the Fund information system using a monthly average based on prior year's experience (last year costs divided by 12). The Accounting Division's methodology for calculating Class IV rates does not consider the impact of depreciation for Class IV items as listed in the Fixed Assets Report. Therefore, the Replacement Reserve, as shown by Exhibit C, is the only Replacement Reserve where revenues where not sufficient to meet the depreciation expenses incurred. Exhibit C shows that Class IV Replacement Reserve rate was 70% (nearly $10,000) below the level it should have been for FY92.

- Our interviews uncovered that this rate has been calculated using the past year's cost for replacement equipment. Consequently, if there was little dollars spent last year, this year will be similarly budgeted. However, this may not be sufficient compared to the loss in depreciated value of all Class IV equipment.

Recommendations:

The Accounting Division should revise its methodology for calculating Class IV Replacement Reserve rates to consider: 27

- Depreciation expenses.
- Replacement cost experience for items not tracked for depreciation (such as low dollar items).
- Inflation factors required for purchasing equipment with "future dollars."

5. Fleet Maintenance System

Findings:

Fund Management is considering acquiring a Fleet Maintenance System. Our review of the features, functions and capabilities for the new system indicates that there has been considerable effort placed into the development of the requirements. However, there are several additional areas that should be considered, such as:

- Vehicle direct charge system to capture all direct costs to an individual vehicle.
- Driver qualification system to track driver status such as license type, equipment certifications, renewal dates, etc.
- Ability to produce maintenance shop schedules, considering the types of maintenance requirements and standard shop hours required in order to level shop loads.
- Ability to track vehicles sent for outside services.
- Ability to generate picklists and reserve parts/material for use during scheduled maintenance.
- Ability to track tire use and rotation.
- Ability to track vehicle warranty and claims.

- Ability to schedule Preventive Maintenance for vehicle based on:
  - Mileage
  - Time lapse
  - Hours used
- Ability to track mechanic's performance

Recommendations:

(28)

The District should prepare more detailed specifications for the Fleet Maintenance System. These specifications should be used to obtain competitive proposals from qualified vendors for a comprehensive Fleet Maintenance System. Based on analysis of the proposals and vendor demonstrations, the District should select and implement the most appropriate system. This may require the assistance of specialized outside resources.

6. Potential Fleet Maintenance Software Vendors

Findings:

Fund Management has developed a list of potential Fleet Maintenance System vendors. However, there are other vendors available, particularly with the capability to operate on the HP/3000 platform that should be considered.

Recommendations:

(29)

The following vendors should also be considered for the Fund's new Fleet Maintenance System:

- ARFleet/3000 by Alden Research, Inc.
- FleetSite by OnSite Systems

7. Fuel Trak System

Findings:

There is no direct interface between the Fuel Trak system being used to track fuel consumption and mileage for Fund vehicles. Multiple operators must manually edit, correct, compile, and enter data into the Fund's information system. Editing of erroneous entries in this fashion is accomplished well after the date of the error, and is more difficult due to this time lag.

Recommendations: ㉚

- An interface should be developed that will automate the collection and transfer of data from the Fuel Trak system to the main Fund information system. This will significantly improve the timeliness of data, and improve the efficiency with which the data is collected. ㉛
- An editing routine should be developed and implemented to prevent incorrect mileage entries at fuel pumps. This editing routine would eliminate the manual editing being performed currently and significantly improve the accuracy of data collected.

E. Other Considerations

1. Key Control

Findings:

- During our review, we examined key control and security of Fund vehicles at the Almaden location. We found that the system was not sufficiently secured to ensure that vehicle keys were drawn by only authorized SCVWD drivers. The current system creates opportunities for keys to be missing without being signed out, unqualified drivers can draw keys, and for potential theft of fund vehicles.
- New Commercial Driver's License (CDL) requirements will significantly impact the degree of security needed to ensure properly licensed operators receive keys for vehicles requiring CDL.

Recommendations:

Fund management should review the current sign-out system and increase the degree of security afforded to Fund vehicles. Keys should be maintained in a locked area, under the control of a knowledgeable individual, and issued only to qualified **SCVWD** drivers. (32)

2. Renting and Leasing Alternatives

Findings:

The listing for Class III vehicles appear excessive considering the amount of use of several vehicles. The Fund's resources have been tied up in several vehicles that could possibly be rented using short-term, cyclical contracts at rates advantages to the District. Although there is some use of such equipment rental at the District, there is no concerted effort to use this approach to reduce required cashflows while ensuring that the Fund can rent state-of-the-art equipment as it becomes necessary.

Recommendations:

- Fund management should initiate a project to review the potential cost savings that can result from renting/leasing vehicles and equipment from commercial sources as they become necessary. Concerns with the need for equipment during emergencies can be addressed during development of a contract by requiring first options during emergency situations. (33)

- Fund management should institute a procedure that requires competitive bids be procured for leasing Class II and III equipment to compare to the proposed Fund rate structure. The most practical and economic decision, considering cyclic use of the vehicle versus potential emergency use, should be made considering these lease alternatives. Using leasing will also provide other non-tangible benefits, such as: (34)
    - Updated and maintained equipment that does not require additional Fund space or maintenance costs.
    - Ability to provide additional vehicles when needed without having to schedule work around a bottleneck vehicle or piece of equipment.

IV. IMPLEMENTATION ACTION PLAN

This Section contains a preliminary action plan to implement the recommendations identified in this report. We believe that this action plan, if promptly adopted and effectively implemented, will substantially improve the operations of the Equipment Working Capital Fund at the **Santa Clara Valley Water District**. Furthermore, these recommendations can provide the basis for future cost savings, economies, service levels, and efficiencies in the Fund.

We recommend that the District carefully consider each recommendation and assign:

- Specific responsibilities
- Target start dates
- Target completion dates
- Additional resource requirements

Management of the District should be directly involved in the development of the implementation action plan to ensure that all concerns are adequately addressed.

EQUIPMENT WORKING CAPITAL FUND

Implementation Action Plan

Action Description	Report Cross Reference	Priority	Responsibility	Target Start Date	Target Completion Date	Resource Requirements
1. Establish Joint-Division EWCF Committee	III.A.1.	H				
2. Update EWCF Manual	III.A.2.	H				
3. Re-Distribute EWCF Manual	III.A.2.	H				
4. Use specialized staff	III.A.3.	M				
5. Modify EWCF Financial Reporting of Revenues	III.B.1.	H				
6. Separate O&M/Replacement Reserves	III.B.2.	H				
7. Modify O&M/Replacement Reserve Rates	III.B.3.	H				
8. Modify Self-Insurance Rates	III.B.4.	H				
9. Review use of "Time-Charge" Methodology for Class I Vehicles	III.B.5.	L				
10. Initiate Procedure to Conduct 100% Review of Fund Rates Annually	III.C.1.	H				
11. Establish Definitive Fund Policy on Timing of Vehicle Replacement	III.C.2.	M				
12. Establish Methodology to Capture Total Direct Costs to Vehicles	III.C.2.	M				
13. Implement New Procedure 0-704	III.C.3.	H				

EQUIPMENT WORKING CAPITAL FUND

Implementation Action Plan

Action Description	Report Cross Reference	Priority	Responsibility	Target Start Date	Target Completion Date	Resource Requirements
14. Comply with IRS requirements	III.C.4.	H				
15. Review Total Impact of New Procedure 0-704	III.C.5.	M				
16. Designate routine Fund Duties and Responsibilities	III.C.6.	H				
17. Designate and Train Accounting EWCF Accountant	III.C.7.	H				
18. Redevelop the EWCF on the Hewlett-Packard computer system	III.D.1.	H				
19. Develop FW30R Calculations Audit Report	III.D.2.	H				
20. Develop system interfaces:						
• General ledger	III.D.3.	H				
• Fleet maintenance	III.D.3.	M				
• Fixed assets	III.D.3.	H				
• WITS	III.D.3.	M				
• Fuel Trak	III.D.3.	M				
21. Change Rate Calculation Methodology for Class IV Equipment	III.D.4.	H				
22. Develop Fleet Maintenance System Requirements	III.D.5.	H				
23. Consider additional Fleet Maintenance software vendors	III.D.6.	H				
24. Select and implement a comprehensive Fleet Maintenance System	III.D.5.	H				

EQUIPMENT WORKING CAPITAL FUND

Implementation Action Plan

Action Description	Report Cross Reference	Priority	Responsibility	Target Start Date	Target Completion Date	Resource Requirements
25. Develop an automated interface between the Fuel Trak System and the EWCF System	III.D.7.	M				
26. Develop mileage editing routine in the Fuel Trak System	III.D.7.	H				
27. Improve Fund Vehicle Sign-out Procedures	III.E.1.	M				
28. Review Leasing Opportunities for Class III Vehicles	III.E.2.	M				
29. Initiate Procedure to Require Competitive Bid for Class II and III Vehicles for Justification of Replacement	III.E.2.	H				
30. Perform a post-implementation review of all findings and recommendations in this report	N/A	H				

V. EXHIBITS

This Section contains specific exhibits necessary to understand the detail that supports many of the key findings presented in the report.

Exhibit A:	An extract of the financial results of the Fund from the SCVWD combined Statement of Operations and Retained Earnings for Fiscal Years 1989 through 1992.
Exhibit B:	Operating & Maintenance (O&M) Accounts comparison of revenues and expenses for FY92.
Exhibit C:	Replacement Reserve Accounts comparison of annual depreciation and revenues for FY92.
Exhibit D:	Self-Insurance Reserve Accounts comparison of revenues and losses incurred for FY92.
Exhibit E:	Replacement Reserve Accounts comparison of life-to-date depreciation and revenues.
Exhibit F:	Fleet Aging Analysis listing average age of Fund vehicles, and potential demand upon Fund to provide capital for vehicle replacement.

EXHIBIT A

RECAPITULATION OF FINANCIAL RESULTS - FY 1989-92
(Year End is June 30)

	FY 1992	FY 1991	FY 1990	FY 1989
Operating Revenues	(Note 3)	$2,237,686	$1,971,329	$1,750,898
O&M Charges	$1,250,673	-	-	-
Replacement Reserve	1,172,859	-	-	-
Self-Insurance (Note 1)	0	0	0	0
Operating Expenses				
Administration	(500)	(460)	(840)	(3,040)
O&M (Note 4)	(2,205,872)	(2,115,261)	(2,122,177)	(1,550,956)
Operating Income	$ 217,160	$ 121,965	$ (151,688)	$ 196,902
Net Operating Revenues				
Interest	94,056	140,999	157,960	117,016
Other	73,456	41,350	8,872	12,476
Non-Operating Expenses	0	0	0	0
Operating Transfers (Note 2)	617,190	333,682	332,422	173,229
Net Income to Fund	$1,001,862	$637,996	$347,566	$499,623

Note 1: Self-Insurance is a direct charge transfer from the operating divisions to the self-insurance fund, and does not affect the EWCF financials. Not shown in financial statements.

Note 2: Operating Transfers is the net effect amount from transferring newly authorized and purchased vehicles into the Fund that are purchased with District funds, not EWCF funds. This amount is also net of transfers out for the accrual of funds for the new headquarters building and other Fund purchases for replacement vehicles.

Note 3: FY 92 detail data:

- Revenues for O&M comprised approximately 51.6% of the revenue charged to the District's operating divisions.
- Revenues for Replacement Reserve comprised approximately 48.4% of the revenue charged to the District's operating divisions.

Note 4: Includes direct O&M expenses (labor, material, services) plus overhead (office, tool, district expenses) plus depreciation expenses.

EXHIBIT B

OPERATING & MAINTENANCE (O&M) ACCOUNTS
REVENUES VS. EXPENSES
(For Year End 6/30/92)

A. EXPENSE CALCULATIONS

Report Number	Title	Description	Amount ($)
FE55R-B	Quadri-weekly Cost Center-Scope Analysis	Budget Vs. Expenditures:	
		Class I Vehicle Charges	$ 583,287.00
		Class IV Equip. Charges	160,633.00
		Class II Vehicle Charges	392,021.00
		Class III Vehicle Charges	494,305.00
		Sub-Total:	$ 1,630,246.00

B. REVENUE CALCULATIONS

Report Number	Title	Description	Amount ($)
FW20R-A	Quadri-weekly Mileage Report	Class I Vehicle Revenue	$ 489,636.69
		Class IV Equip. Revenue	132,361.58
FW20R-B	Review Point	Class II Vehicle Revenue	377,261.84
		Class III Vehicle Revenue	251,412.00
		Sub-Total:	$ 1,250,672.11

EXHIBIT B (Continued)

OPERATING & MAINTENANCE (O&M) ACCOUNTS
REVENUES VS. EXPENSES
(For Year End 6/30/92)

C. SHORTAGE REVENUE AMOUNT

Description	Amount ($)	Percentage
Class I Vehicle Revenue	$ (93,650.31)	(19.1%)
Class IV Equip. Revenue	(28,271.42)	(21.4%)
Class II Vehicle Revenue	(14,759.16)	(3.9%)
Class III Vehicle Revenue	(242,893.00)	(96.6%)
Shortage Amount:	$ (379,753.89)	(30.4%)

D. ANALYSIS

Based on this year's financial shortage in O&M revenue to sufficiently fund the continuing operations of the maintenance and supply activities, and the method of consolidating the revenue for financial reporting, there appears to be a situation where monies being collected in the Fund's data processing system for Replacement Reserve are being cross-allocated to fund O&M shortages.

EXHIBIT C

REPLACEMENT RESERVE ACCOUNTS
REVENUES VS. DEPRECIATION (ANNUAL)
(For Year End 6/30/92)

A. DEPRECIATION CALCULATIONS

Report Number	Title	Description	FY 92 Annual Depreciation Amount ($)	
FN28R-B	Fixed Assets Depreciation	Depreciation Calculation:		
		Class I Vehicle Deprec.	$ 308,714.59	
		Class IV Equip. Deprec.	22,393.25	
		Class II Vehicle Deprec.	215,403.70	
		Class III Vehicle Deprec.	104,548.72	
		Sub-Total:	$ 651,060.26	(Note 1)

B. REVENUE CALCULATIONS

Report Number	Title	Description	Amount ($)
FW20R-A	Quadri-weekly Mileage Report	Class I Vehicle Revenue	$ 435,197.54
		Class IV Equip. Revenue	13,251.68
FW20R-B	Review Point	Class II Vehicle Revenue	528,595.22
		Class III Vehicle Revenue	195,814.35
		Sub-Total:	$ 1,172,858.79

EXHIBIT C (Continued)

REPLACEMENT RESERVE ACCOUNTS
REVENUES VS. DEPRECIATION (ANNUAL)
(For Year End 6/30/92)

C. EXCESS REVENUE AMOUNT

Description	Amount ($)	Percentage
Class I Vehicle Revenue	$ 126,482.95	29.1%
Class IV Equip. Revenue	(9,141.57)	(70.0%)
Class II Vehicle Revenue	313,191.52	59.2%
Class III Vehicle Revenue	91,265.63	46.6%
Excess Amount:	$ 521,798.53	44.5%

However, accounting for the inflation factor that should be considered in this analysis, using a conservative 4% per year as developed with Mr. Ed Parfet of the SCVWD's investment management group, there should be additional dollars collected. An approximate calculation follows:

Description	Amount ($)	Adjusted Excess ($)
Class I Vehicle Deprec.	$12,348.58	$ 114,134.37
Class IV Equip. Deprec.	895.73	(10,037.30)
Class II Vehicle Deprec.	8,616.15	304,575.37
Class III Vehicle Deprec.	4,181.95	87,083.68
Sub-Total:	$26,042.41	$ 495,756.12

EXHIBIT C (Continued)

REPLACEMENT RESERVE ACCOUNTS
REVENUES VS. DEPRECIATION (ANNUAL)
(For Year End 6/30/92)

D. ANALYSIS

FY 92 revenue was significantly above normal depreciation, however, this amount also appears significantly higher than the amount needed for Fund recoupment of inflation costs related to the calculation of future dollars needed to purchase a new vehicle. The EWCF manual addresses this method and it appears appropriate. However, even allowing for this additional amount, the amount listed appears excessive.

As shown later in Exhibit E, even though this excess amount ($521,789.53) was collected for Replacement Reserve, the funds were used largely for replacing the dollar shortfalls related to O&M continuing operations. This is further discussed in Exhibit B.

Reasons for such a shortfall are recapped as follows:

1. Charges are based on Class I vehicles using mileage for a planned economic life, regardless of the actual miles accrued by the vehicle. Replacement is calculated using age and/or mileage, which can result in vehicles being sold without having recouped sufficient replacement dollars. Class II and III rates appear generally adequate according the financial data available. Class I rates appear not to recoupe sufficient dollars.

2. SCVWD financial statements do not segregate O&M amounts from Replacement Reserves. Consequently, although the Combined Statement of Operations and Retained Earnings appears to show sufficient revenues are generated, a detailed examination of the separate accounts and the FW30R report (of amounts collected for Replacement Reserve) shows that there is a significant shortfall. Exhibit E shows this shortfall to be $1,710,118.19 as of June 30, 1992.

3. Although the data is available to identify a problem with the Funds finances, there is no interface between the Financial System and the Funds reports to show the discrepancies. Detailed investigation, such as performed in this engagement is needed to identify the key problem.

The EWCF Manual computations use a rate structure basis that only indirectly considers time/age as part of the calculation, with the assumption of an average number of miles or hours per year. Therefore, low use vehicles do not adequately capture their O&M/Replacement Reserve/Self-Insurance costs.

An example is that if a Class I-B vehicle is charged out for one year and is driven for only 1,000 miles, there has been approximately $1,500 depreciation value (plus periodic maintenance) associated with having the vehicle. However, with the current rate structure, the Fund would only be credited with approximately $230 for O&M, $ 194 for Replacement Reserve, and $ 5.00 for Self-Insurance. This amount would be inadequate, and appears to be the case with many vehicles.

A review of the FW30R Vehicle Cost Report shows a large number of Class I vehicles that are used significantly below the annual mileage average required to generate its Replacement Reserve and other costs. Examples are:

ID Number	FY 92 Mileage	ID Number	FY 92 Mileage
R5129	3,232	R5577	3,161
R5134	4,555	R5579	4,522
R5135	5,389	R5587	3,662
R5200	4,669	R5590	3,721
R5465	4,300	R5635	2,621
R5569	6,259	R5831	5,078

For high usage vehicles, the use of a mileage charge is appropriate and best reflects the decreasing value associated with the use of the vehicle. For low usage vehicles, the use of a daily charge is more appropriate.

Note 1: Depreciation expense total of $651,060.26 from the FN28R-B report does not match the general ledger amount of $675,076.41 from the FD75R-B report. The general ledger includes adjustments not in the EWCF system.

EXHIBIT D

SELF-INSURANCE RESERVE ACCOUNTS
REVENUES VS. COST EXPERIENCE (FY 92)
(For Year End 6/30/92)

A. VEHICLE REPAIR COST CALCULATIONS

Report Number	Title	Description	Amount ($)
N/A	FY 92 Cost Exposure Recap Supplied by Mr. David Born of SCVWD Risk Mgmt.	FY 92 Costs Incurred:	
		Class I Vehicles Charges	$ 7,186.00
		Class II/III/IV Charges	9,216.00
		Sub-Total:	$ 16,402.00

B. REVENUE CALCULATIONS

Report Number	Title	Description	Amount ($)
FW20R-A	Quadri-weekly Mileage Report	Class I Vehicle Revenue	$ 9,908.71
		Class IV Equip. Revenue	1,325.22
FW20R-B	Review Point	Class II Vehicle Revenue	264.36
		Class III Vehicle Revenue	58.88
		Sub-Total:	$ 11,557.17

EXHIBIT D (Continued)

SELF-INSURANCE RESERVE ACCOUNTS
REVENUES VS. COST EXPERIENCE (FY 92)
(For Year End 6/30/92)

C. SHORTAGE REVENUE AMOUNT

Description	Amount ($)	Percentage
Class I Vehicle Excess	$ 2,722.71	27.5% (overcharged)
Class IV Equip. Shortage (Note 1)	0.00	0.0%
Class II/III Vehicle Shortage	8,892.76	2,241.2% (undercharged)
Shortage Amount:	$(4,844.83)	41.9%

D. ANALYSIS

FY 92 revenue was significantly below cost exposure, with the Fund's rate structure generating 41.9% less than the break even amount necessary. Additionally, as shown in Section C above, the Class I rate appears to be overcharged by 27.5%, while Class II/III is significantly undercharged by 1,285.5%.

Note 1: Class IV is an estimated amount based on 10% of the rate charged for the Replacement Reserve. This amount is fixed yearly and is directly charged (as a lump sum) to the Fund monthly rather than set as a rate. Additionally, the exposure in FY 92 was stated by Risk Management to be mainly in the Class II/III area and not Class IV.

EXHIBIT E

REPLACEMENT RESERVE ACCOUNTS REVENUES VS. DEPRECIATION (LIFE-TO-DATE)
(As of Year Ending 6/30/92)

A. DEPRECIATION CALCULATIONS

Report Number	Title	Description	Depreciation Amount ($)
FN28R-B	Fixed Assets Depreciation (Net of vehicles/Equip. "sold ")	Depreciation Calculation:	
		Class I Vehicles	$ 984,292.14
		Class IV Equip.	232,077.19
		Class II Vehicles	914,824.91
		Class III Vehicle	569,766.65
		Sub-Total:	$ 2,700,960.89

B. REVENUE CALCULATIONS

Report Number	Title	Description	Replacement Reserve Amount ($)
FW30R	EWCF Vehicle Cost Report	Historical Usage/Revenue: Class I Vehicle Charges	$ 927,349.44
		Class IV Equip. Charges	174,063.87
		Class II Vehicle Charges	2,045,049.23
		Class III Vehicle Charges	1,264,616.54
		Sub-Total:	$ 4,411,079.08

C. EXCESS REVENUE AMOUNT (LTD)

Discounting the effects of inflation and aging of the vehicle fleet/equipment pool, the following is the total excess dollars accumulated to the fund on the FW30R report:

Excess Reserve: $ 1,710,118.19

EXHIBIT E (Continued)

REPLACEMENT RESERVE ACCOUNTS
REVENUES VS. DEPRECIATION (LIFE-TO-DATE)
(As of Year Ending 6/30/92)

D. REPLACEMENT RESERVE VS. BALANCE SHEET

Our review of the **SCVWD** Combined Balance sheet for Year Ending June 30, 1992 showed that $ 2,701,780 was available for the Replacement Reserve, rather than the $ 4,411,079.08 shown charged by the FW30R Vehicles Cost Report.

The data shown in Exhibit A, demonstrating the high proportion of O&M charges compared to the total dollars charged, indicates that part of the amounts collected for the Replacement Reserve were used to address O&M shortages. Our in-depth review of FY 92's cashflows in Exhibits B and C shows a shortfall of $379,753.89 in O&M revenue compared to expenses. Additionally, based on the Operating Income of the Fund for years FY 89, 90, and 91, there appears to be significantly lower amounts available for the retained earnings (and hence for the Replacement Reserve).

As presented to us during our review, the actual amount in retained earnings for the Fund's Replacement Reserve was $ 2,710,780 (per the **SCVWD's** Combined Balance Sheet for year ending 6/30/92). This matches closely to the $2,700,960.89 dollars shown above in accumulated depreciation from the F28R-B Fixed Assets Report. However this amount does not show any amounts that were collected to account for inflation costs needed at time of vehicle/equipment replacement. The EWCF Manual does plan for, and include allowances in, its calculations to collect additional amounts to account for the increased future cost of the replacement vehicle/equipment. However, based on the current status of the fund's Balance Sheet's Replacement Reserve there appears to be an approximate shortage of $ 458,558.86 in the amounts that will be needed for this purpose.

EXHIBIT E (Continued)

REPLACEMENT RESERVE ACCOUNTS
REVENUES VS. DEPRECIATION (LIFE-TO-DATE)
(As of Year Ending 6/30/92)

E. EXCESS REVENUE AMOUNT (LTD)

Including the effects of inflation and aging of the vehicle fleet/equipment pool, the following is the adjustment that should be considered when analyzing the FW30R report.

Using the average age of the fleets, and the accumulated depreciation life-to-date, we have extrapolated the approximate amount needed for inflation in replacing these vehicles and the items in Classes I through IV. Assuming a conservative inflation factor of 4%, obtained from Mr. Ed Parfet of the SCVWD's investment group, the following inflation factors should be used to adjust the life-to-date depreciation to account for inflation:

Class I:	Average Age	= 2.8 years		
	Inflation Factor	= 0.1162	Inflation Amount Required:	$ 114,374.75
Class II:	Average Age	= 4.3 years		
	Inflation Factor	= 0.1839	Inflation Amount Required:	168,236.30
Class III:	Average Age	= 4.7 years		
	Inflation Factor	= 0.2027	Inflation Amount Required:	115,491.70
Class IV:	Average Age	= 5.9 years		
	Inflation Factor	= .2605	Inflation Amount Required:	60,456.11
			Total:	$ 458,558.86

This calculation is an approximation by class and average age of the dollars collected by the FW30R report in addition to the depreciation of the vehicles/equipment. Therefore, adjusting for inflation and the age of the vehicles/equipment, the Replacement Reserve Excess/Shortage is more accurately stated as:

FW30R Replacement Reserve Accumulation Excess: $ 1,251,559.33

To determine a more exact amount, a detailed item by item analysis would be required.

EXHIBIT F

FLEET AGING ANALYSIS
(As of Year Ending 6/30/92)

A. ITEM CLASS AGING

Quantity by Model Year

Class I-A/B:

1992	1991	1990	1989	1988	1987	1986	1985	1984+
12	12	16	14	5	7	4	1	0

Class I-C/D:

1992	1991	1990	1989	1988	1987	1986	1985	1984+
3	5	6	12	5	2	2	0	1

Class I-E:

1992	1991	1990	1989	1988	1987	1986	1985	1984+
13	19	10	5	1	11	10	7	4

Class II:

1992	1991	1990	1989	1988	1987	1986	1985	1984+
3	10	6	6	4	6	3	3	17

Class III:

1992	1991	1990	1989	1988	1987	1986	1985	1984+
3	2	4	6	1	1	1	3	10

Class IV:

1992	1991	1990	1989	1988	1987	1986	1985	1984+
0	5	0	11	13	8	5	6	39

EXHIBIT F (Continued)

FLEET AGING ANALYSIS
(As of Year Ending 6/30/92)

B. AVERAGE AGE BY CLASS

Using vehicles-years (number of vehicles times its age), and 1992 as the base year of zero, the following classes show the aging of the various fleets:

Class I-A/B:	Number of vehicles	-	71			
	Vehicles Years	-	172	**Average Age**	**=**	**2.4 years**
Class I-C/D:	Number of vehicles	-	36			
	Vehicles Years	-	103	**Average Age**	**=**	**2.9 years**
Class I-E:	Number of vehicles	-	80			
	Vehicles Years	-	254	**Average Age**	**=**	**3.2 years**
Class II:	Number of vehicles	-	58			
	Vehicles Years	-	251	**Average Age**	**=**	**4.3 years**
Class III:	Number of vehicles	-	31			
	Vehicles Years	-	144	**Average Age**	**=**	**4.7 years**
Class IV:	Number of Items	-	87			
	Item Years	-	514	**Average Age**	**=**	**5.9 years**

EXHIBIT F (Continued)

FLEET AGING ANALYSIS
(As of Year Ending 6/30/92)

C. AGED VEHICLES EXCEEDING PLAN

As stated in the Equipment Working Capital Fund Manual, the planned age of vehicles for rate structure computations is published. Additionally, the Funds IS Fixed Assets Depreciation report (FN28R-B) contains asset Estimated Life dates. They are as follows:

	Number of Years Life:		*Number of Items*	*Items*
	EWCF Manual	Fixed Asset Life	Exceeding EWCF Life	Exceeding Asset Life
Class I-A	6	6	0	0
Class I-B	5-6	6	5	5
Class I-C	6-9	6	1	1
Class I-D	3-6	6	2	2
Class I-E	5	6 years = 70 items	32	7
		10 years = 10 items		0
Class II	Estimated	4 years = 1 item	-	0
		6 years = 13 items	-	4
		8 years = 2 items	-	8
		10 years = 39 items	-	0
		12 years = 1 item	-	0
Class III	Estimated	5 years = 2 items	-	2
		6 years = 6 items	-	2
		8 years = 2 items	-	1
		10 years = 15 items	-	0
		12 years = 1 item	-	1
		15 years = 1 item	-	1

EXHIBIT F (Continued)

FLEET AGING ANALYSIS
(As of Year Ending 6/30/92)

D. ANALYSIS

There appears to be cases where the Equipment Working Capital Fund Manual has not been used in determining the economic life of the assets, resulting in incongruities between the calculation of the rate structure, the depreciation schedule being used by the Fixed Asset System, and ultimately the timing of the decisions to replace equipment as it becomes over-aged for fleet purposes. As shown in the above Section B, there are a significant number of vehicles that have been held past their defined useful and/or economic life. This applies particularly to the Class I-E vehicles where 40% of the vehicles exceed the EWCF Manual's five years of age, and 9% exceed the Fixed Asset Systems Estimated Life.

At an average new cost of $17,290 (cost of last asset entered to Fixed Asset System on FN28R-B report), this replacement alone will drain the Replacement Reserve by $617,280 if continued. Some other representative impacts, based on age and not mileage, are:

	Replacement Vehicles	Estimated Cost (Each)	Total Fund Cost
Class I-B	5	$ 9,787	$ 48,935
Class I-C	1	$ 13,215	13,215
Class I-D	2	$ 10,902	21,804
Class I-E	32	$ 17,290	617,280
Class II	12	$ 39,384	472,608
Class III	7	$ 20,000	140,000
		Cash Requirements: (Note 1)	$1,313,842

EXHIBIT F (Continued)

FLEET AGING ANALYSIS
(As of Year Ending 6/30/92)

Class IV items are not shown in the analysis above. These items, although considered in depreciation and there are Replacement Reserve dollars accumulated, are not planned for replacement except when the item is physically not repairable. Consequently there is no linkage between the depreciation of the items and the replacement reserve dollars being accumulated. Aging is inconsequential except that the inflationary costs associated with replacement should be considered based on aging, which has not been the case. The Replacement Reserve is adjusted annually and is solely based on the dollars spent to "last year" on replacing Class IV items, not the depreciation and eventual replacement of the individual item at an inflated dollar cost.

Currently, according to the Accounting Division and the **SCVWD** Combined Balance Sheet, there is $ 2,710,780 available in the Fund for Replacement Reserve, rather than the amount shown in the FW30R report. Consequently, the funds are available for this fleet replacement in the short-term, but Fund recoupment must be improved significantly to replace the amounts charged for Reserve Replacement and subsequently used in O&M (see Exhibits A and B).

Note 1: Class IV is not considered in this portion of the Analysis as there is no defined life or charging method from the EWCF Manual.